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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,407	03/30/2001	Srinivas Kandala	8371-118	9018

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EXAMINER	
NGUYEN, BRIAN D	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/823,407	KANDALA, SRINIVAS	
	Examiner	Art Unit	
	Brian D. Nguyen	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heide (5,677,909) in view of Haartsen (6,574,266).

Regarding claim 1, Heide discloses a communication device (12) comprising: a physical medium (18, 19); and a processor (16 of figure 1 and col. 5, lines 1-5) coupled with the physical medium, wherein the processor is adapted to receive a plurality of reservation request (access request) frames from a plurality of respective devices during a Centralized Contention Interval for a wireless communication channel (see col. 5, lines 51-60); determine at a MAC sublayer a schedule of transmission sessions for exchanging data with the respective devices as per the respective reservation requests (see col. 10, lines 25-43); identify one of the devices from the schedule as being the next one; acquire control of the channel; transmit the polling frame over the channel while in a DCF mode (see col. 10, lines 23-24); and exchange data over the channel

from the identified device during the respective session (see col. 8, lines 45-47). Heide does not specifically disclose decoding receiving information such as a reservation request and a return address and encoding transmitting information such as the associated return address. However, encoding and decoding are well known in the art. Haartsen discloses the use of encoding and decoding in a communication network (see col. 4, lines 38-39 and 61-62). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to encode/decode data as taught by Haartsen in the system of Heide in order to protect the data during transmission.

Regarding claim 2, Heide discloses the processor is further adapted to: identify another one of the devices from the schedule as being the next one; and repeat (e) through (h) (see figure 6 and col. 10, lines 25-43 where the remote stations are sequentially assigned time slots).

Regarding claim 3, Heide discloses receiving the data is to be within a SIFS of transmitting the polling frame (see col. 8, lines 45-47 where the remote station transmit data upon receiving of CTS frame. Note that a Short Inter-Frame Space (SIFS) is defined by IEEE 802.11).

Regarding claim 4, Heide discloses the polling frame is a CTS frame (see col. 8, lines 36-39).

Regarding claims 5 and 6, Heide discloses a communication device (14) comprising a physical medium (19); and a processor (not shown) coupled with the physical medium, wherein the processor is adapted to transmit a reservation request through a wireless communication channel during a Centralized Contention Interval (see col. 3, lines 51-60); receive a polling frame through the channel while in a DCF mode (see col. 5, lines 63-65); determine whether the return

address matches an address of a MAC sublayer; and if so, transmit data from the MAC sublayer through the channel (see col. 8, lines 35-50); and discontinue transmitting data after the session window ends (see col. 10, lines 25-43 where time slots are assigned to each remote stations and a respective remote station will only be allowed to transmit data during the respective assigned time slots). Heide does not specifically disclose decoding a return address from the polling frame. However, decoding received information is well known in the art. Haartsen discloses the use of decoding in a communication network (see col. 4, lines 38-39 and 61-62). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decode data as taught by Haartsen in the system of Heide in order to extract information from the encoded data.

Regarding claim 7, Heide discloses transmitting the data from the MAC sublayer is to be performed within a SIFS from receiving the polling frame (see col. 8, lines 45-47 where the remote station transmit data upon receiving of CTS frame. Note that a Short Inter-Frame Space (SIFS) is defined by IEEE 802.11).

Regarding claim 8, Heide discloses the polling frame is a CTS frame (see col. 8, lines 36-39).

Regarding claims 9-12, claims 9-12 are article claims that have substantially all the limitations of the respective apparatus claims 1-4. Therefore, they are subject to the same rejection.

Regarding claims 13-16, claims 13-16 are article claims that have substantially all the limitations of the respective apparatus claims 5-8. Therefore, they are subject to the same rejection.

Regarding claims 17-20, claims 17-20 are method claims that have substantially all the limitations of the respective apparatus claims 1-4. Therefore, they are subject to the same rejection.

Regarding claims 21-24, claims 21-24 are method claims that have substantially all the limitations of the respective apparatus claims 5-8. Therefore, they are subject to the same rejection.

Response to Arguments

4. Applicant's arguments filed 2/9/05 have been fully considered but they are not persuasive.

The applicant argued that *claim 1 specifics a processor adapted to decode a reservation request from each reservation request frame that includes a return address of a Medium Access Control (MAC) sublayer of an associated device. The processor then determines at the MAC sublayer a schedule of transmission sessions for exchanging data with the respective devices as per the respective reservation requests. The processor further transmits the polling frame over the channel while in a Distribution Coordination Function (DCF) mode. None of these limitations are suggested in Heide. In fact, Heide specifically teaches away from determining a schedule of transmission sessions at the MAC sublayer as specified in claims 1-24. For example, column 5, lines 32-40 in Heide states that the HDLC data communications protocol specification is used for all information transfer and supervisory commands. Column 5, line 61 - column 5, line 1 3, specifies that a Destination Identifier (DIDI is used for identifying the address of the station to which the frame is being sent. Heide then state that the remote stations typically*

receive a new DID address each time the remote station registers with the network 1.0. This type of address registration would not work with a system as specified in claim 1 where each request frame includes a return address of a Medium Access Control (MAC) sublayer of an associated device. Further, there is no suggestion at col. 10, lines 23-24 in Heide of a processor transmitting a polling frame over a channel while in a Distribution Coordination Function (DCF) mode as also specified in claim 1 . Col. 10, lines 23-24 in Heide simply states that the central station would poll the remote stations in priority-level order. There is no suggestion that this polling is being performed while in a Distribution Coordination Function (DCF) mode. The examiner disagrees because claim 1 claims a processor adapted to decode a reservation request from each request frame, **and** a return address of a MAC sublayer of an associated device, not a processor adapted to decode a reservation request from each request frame **that includes** a return address of a MAC sublayer of an associated device. Heide does not teach away from determining a schedule of transmission sessions at the MAC sublayer as specified in claims 1-24. For example, col. 10, lines 25-43 describes scheduling time slots ST1, ST2, and ST3 for remote stations 1-3. The teaching of Heide that the remote stations typically receive a new DID address each time the remote station register with the network is not related to or excluded from claims 1-24. In fact, the claimed invention may also receive a new DID address each time the remote station register with the network. Note that when a station sends an access request to a central station, the request station must includes its own address in the request frame and when the central station sends a response to the request station, the response must include the address of the request station in order to distinguish one request station from a plurality of request stations. Note also that the address registration process in a communication is not related and is separated

from the accessing process. Heide clearly teaches the DCF mode (contention based protocol) as described, for example, in the abstract. Note that the standard defines two medium access schemes: a distributed coordination function (DCF) and a point coordination function (PCF). The DCF is based on a contention access scheme and the PCF is based on a contention free access scheme. The applicant only argued to the rejection of claim 1. The argument is applicable to claims 9 and 17 but not claims 5, 13, and 21 because claim 5, for example, is quite different from claim 1. The examiner assumes the applicant agreed on the rejection of claim 5-8, 13-16, and 21-24.

Conclusion

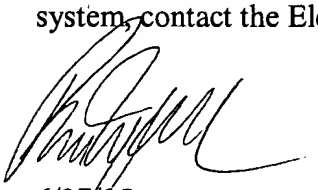
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



6/27/05

BRIAN NGUYEN
PRIMARY EXAMINER